

Job# 10-5245 BASF
ETT 114 Oct. 9, 1996

HER 01259

DAILY TIME LOG

DATE	10-10-96	CUSTOMER:	BASF
JOB NO:		BARGE:	Err 114

START TIME: 16:00

STOP TIME: 20:30

NAME	HOURS	TOTAL HOURS	NAME	HOURS	TOTAL HOURS
R. S. Peñiz	4½	4½			
D. Guel	2	2			
J. T. Olivarez	2	2			
I. Silva	4½	4½			
J. Rodriguez	4½	4½			

MATERIAL LIST:

Cradle, M/V Gap Lynn, Weld Machine,
Cutting Rig, Chemist

JOB DESCRIPTION:

Chemist Check barge for Safe Entry & Hot Work
Haul Out of barge, Insert 8" x 18" x 18" plate, Weld
two 6" fractures - (Bow Rake), Starboard corner rap, Haul down
and Shift barge to #3 dock,

HER 01260

DAILY TIME LOC

DATE	10-10-86	CUSTOMER	BASF
JOH NO.	5245	BARGE	ETT-114

START TIME 7:00 AM

STOP TIME 7:30 PM

NAME	HOURS	TOTAL HOURS	NAME	HOURS	TOTAL HOURS
Alcedin	10				
Quinton	7 1/2				
mark	7 1/2				
Rivera	7 1/2				
CASAS	1 1/2				
Cruz	1 1/2				

MATERIAL LIST:

JOH DESCRIPTION:

Strip Blow down ad. Deballast using
 tank #202 H-302 ad. stop RAKE ad. Bow RAKE

HER 01261

DAILY TIME LOC

DATE	10-14-86	CUSTOMER	BASE
JOHN NO.		PHONE	EXT-114

START TIME 7:00 AM

STOP TIME 10:00 AM

NAME	HOURS	TOTAL HOURS	NAME	HOURS	TOTAL HOURS
Charles	3				
Quinton	3				

MATERIAL LIST:

JOB DESCRIPTION:

Reballast (normal Ballast) - Stern Box, Bow Rake 5 steps

HER 01262

HERCULES

MARINE SERVICES CORPORATION

P. O. Drawer O • Freeport, Texas 77541

INVOICE NO. 3609
DATE Oct. 16, 1996
Job No. 5245
Location Freeport, TX

TO: BASF
607 Copper Road
Freeport, TX 77541

PLEASE REMIT PAYMENTS TO:
11011 RICHMOND
SUITE 500
HOUSTON, TX. 77042

Terms : Net 30

FOR:

Service to the ETT 114 as follows:

On 10/10 set up equipment to
Strip out all free product
Blow cargo pipeline and stripping system
Vacuum blow dry cargo tanks
Pressure test cargo pipeline 40 PSI
Close Barge. Deballast wing tanks 2,3,4
stem rake and bow rake. Reballast
(Normal Ballast) stem rake & bow rake.
Chemist check barge for safe entry & hot work
Haul out of barge, insert 3/8x 18"x18" plate
weld two 6" fractures - (bow rake), starboard corner
rap, haul down and shift barge to #3 dock.
Remove equipment.

LABOR:	Leadman	5 hr.	@	35.00 (ST)	175.00
	Leadman	5 hr.	@	49.50 (OT)	247.50
	Journeyman	23 hr.	@	32.50 (ST)	747.50
	Journeyman	23 hr.	@	45.75 (OT)	1052.25
WATER:	50,000 gal		@	5.00/1,000 gal	250.00
MATERIAL:	40.00	Plus 25%	=	10.00	50.00
CHEMIST:	300.00	Plus 25%	=	75.00	375.00
EQUIPMENT:	Compressor	10 hr.	@	48.00	480.00
	Air Movers	30 hr.	@	5.00	150.00
	Vacuum	4 hr.	@	30.00	120.00
	Hand Hose	10 hr.	@	12.00	120.00
	3" Gas Pump	32 hr.	@	18.00	576.00
	2" Strip Pump	12 hr.	@	15.00	180.00
	Haul Out	1 hr.	@	1,100.00	1,100.00

TOTAL AMOUNT DUE

\$5623.25

PHONE: (409) 233-6371

HER 01263

Strength through Experience, Equipment, Know-How

Job Workscope/Breakdown

Job No: 10-5245 Date: 10-9-96 Invoice Number: 3609
 Customer: BASF Rate/MV: ETH 114

Foreman:	S/P	60	38.00	
	O/P	60	53.25	
Leadman:	S/P	5	35.00	175.00
	O/P	5	49.50	247.50
Journeyman:	S/P	23	32.50	747.50
	O/P	23	45.75	1,052.25
Disposal:	Slip Oil	1	0.00	
	Water	50	0.15	
Weld:		50,000	5.00/1,000 gal	250.00
Material:		40.00	Plus 25% 10.00	50.00
Stock:			Plus 25%	
Chemist:		300	Plus 25% 75	375.00
Equipment:	Compressor	10	48.00	480.00
	Air Movers	30	5.00	150.00
	Forklift		30.00	
	Tugboat		100.00	
	Suction Rig		100.00	
	Vacuum	4	30.00	120.00
	Hand Hose	10	12.00	120.00
	Weld Machine		15.00	
	Cherry Picker		70.00	
	Crane		150.00	
	3" Gas Pump	32	18.00	576.00
	2" Strip Pump	12	15.00	180.00
	Butterworth		10.00	
	4" Elec. Pump		15.00	
	Cutting Rig		8.00	
	Hand Out	1	1,100.00	1,100.00
	Truck		25.00	
	Hand Tools		10.00	

HER 01264

Total Invoice: 5,623.25

**HERCULES**

MARINE SERVICES CORPORATION

Strength through environmental awareness and customer service

P.O. Drawer O
Freeport, Texas 77541Office (409) 233-6371
Fax: (409) 233-6375Date: 10-10-86 Job No: 5245 Barge/MV: ETT 114

EQUIPMENT	HOURS
Compressor	10
Air Movers	24
Vacuum	4
Steam Rig	
Hand Hose	2
Boiler	
2" Strip Pump	12
3" Diesel Pump	32
4" Electric Pump	
Crane	
Cherry Picker	
Forklift	
Tug Boat	
Welding Machine	
Cutting Rig	
Work Barge	
Haul Out	
Truck	
Hand Tools	

STOCK	NUMBER
Coveralls	2
Batteries	2
Respirator Filters	3
Gloves	2
Flashlights	
Gaskets	
Goggles	3
Boots	
Raincoats	
White Rags	

HER 01265

ON WAYS

DATE: _____

ITEM NUMBERS

1

Reballast repair hole in Bow Hatch.
Strip & Blow Dry

2

Reballast (Normal) w/ 5' 4, and Bow Hatch.

3

4

CITY WATER

07269200

07308000

5

6

7

8

9

10

THIS SHALL SERVE AS YOUR AUTHORIZATION TO PROCEED WITH THE ABOVE.

Signed: _____

DANIEL DUNN

Date: _____

10-10-86

HER 01267

HAZARDS COMMUNICATION STANDARD

OSHA 1910.1200

EMPLOYEE HAZARDOUS MATERIALS TRAINING PROGRAM

Date 10-10-86 Supervisor Alvaro Prieto
Plant HOPEWELL MACHINE Client Safety _____
Area GAS FUEL DOCK

The following listed materials are considered to be hazardous to the employees working in this area:

CYCLOHEXANE _____

The employees assigned to work in this area have been informed of the hazardous materials in this area, the hazards they present to the workers, the location of hazards listed, the protective equipment that has been provided and where it is located, and procedures to be followed in case of an accidental exposure. I have received the training listed above and will so designate by signing this form.

John Zuber _____
James J. Prieto _____
James J. Prieto _____
James J. Prieto _____
James J. Prieto _____

HER 01268



USA and WORLDWIDE

December 31, 1990

Material Safety Data Sheet

CYCLOHEXANE (98%, 99.5%, 99.8%, Research Grade, Spectro Grade)

PHILLIPS 66 COMPANY
A Subsidiary of Phillips Petroleum Company
Bartlesville, Oklahoma 74004

PHONE NUMBERS
Emergency: _____
Business Hours (918) 661-3865
After Hours (918) 661-8118
General MSDS Information: _____
(918) 661-8327

A. Product Identification

Synonyms: Borger Refinery Stream No. 657; Sweeny Refinery
Unit 19 Cyclohexane Product; Puerto Rico Core
Stream No. 3216; Unit 3.2 Stabilizer Column Bottoms
(Puerto Rico Core)

Chemical Name: Cyclohexane
Chemical Family: Cycloparaffinic Hydrocarbon
Chemical Formula: C_6H_{12}
CAS Reg. No.: 110-82-7
Product No.: N249, N24500, N24042

Product and/or Components Entered on EPA's TSCA Inventory: YES

This product is in U.S. commerce, and is listed in the Toxic Substances Control Act (TSCA) Inventory of Chemicals; hence, it is subject to all applicable provisions and restrictions of 40 CFR, section 721 and 723.250.

B. Hazardous Components

Ingredients	CAS Number	% By Wt.	OSHA PEL	ACGIH TLV
Cyclohexane	110-82-7	X	300 ppm	300 ppm

* See Section N for additional product composition information.

NA - Not Applicable NE - Not Established

HER 01269

C. Personal Protection Information

Ventilation: Use adequate ventilation to control exposure below recommended levels.

Respiratory Protection: For concentrations exceeding the recommended exposure level, use NIOSH/MSHA approved air purifying respirator. In case of spill or leak resulting in unknown concentration, use NIOSH/MSHA approved supplied air respirator. If conditions immediately dangerous to life or health (IDLH) exist, use NIOSH/MSHA approved self-contained breathing apparatus (SCBA).

Eye Protection: Use safety glasses with side shields.

Skin Protection: Wear polyvinyl alcohol or Buna-N gloves. Use full-body, long sleeved garments to prevent skin contact.

NOTE: Personal protection information shown in Section C is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

D. Handling and Storage Precautions

Avoid inhalation and skin and eye contact. Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Wash thoroughly after handling. Provide means of controlling leaks and spills. Immediately remove and launder contaminated clothing before reuse.

Store in a cool, well-ventilated area away from ignition sources. Provide means of controlling leaks and spills. Bond and ground during liquid transfer. Keep containers closed.

E. Reactivity Data

Stability: Stable

Conditions to Avoid: Not Applicable

Incompatibility (Materials to Avoid): Oxygen and strong oxidizing materials

Hazardous Polymerization: Will Not Occur

Hazardous Decomposition Products: Carbon oxides and various hydrocarbons formed when burned.

F. Health Hazard Data

Recommended Exposure Limits:

See Section B.

HER 01270

Acute Effects of Overexposure:

- Eye:** Contact with the liquid or high vapor concentrations may cause mild eye irritation including redness, swelling of mucous membranes and tearing.
- Skin:** Nominal skin absorption. May defat skin upon repeated or prolonged contact resulting in redness, swelling, pain or thickening. Prolonged exposure to high vapor concentrations may cause a mild mucous membrane irritation.
- Inhalation:** High vapor concentrations may cause dizziness, excitement, hyperactivity, rapid breathing, difficulty breathing, fatigue, headache, incoordination, tremors, nausea and respiratory irritation. Extreme exposures may cause anesthesia, unconsciousness and death.
- Ingestion:** May cause increased respiration rate, fatigue, diarrhea, nausea and central nervous system depression. Extreme exposure may cause circulatory collapse and death. May be aspirated into lungs if swallowed, resulting in pulmonary edema and chemical pneumonitis.

Subchronic and Chronic Effects of Overexposure:

No known applicable information.

Other Health Effects:

No known applicable information.

Health Hazard Categories:

	Animal	Human		Animal	Human
Known Carcinogen	—	—	Toxic	—	—
Suspect Carcinogen	—	—	Corrosive	—	—
Mutagen	—	—	Irritant	—	—
Teratogen	—	—	Target Organ Toxin	X	X
Allergic Sensitizer	—	—	Specify - Lung - Aspiration Hazard		
Highly Toxic	—	—			

First Aid and Emergency Procedures:

- Eye:** Flush eyes with water.
- Skin:** Flush skin with water for fifteen minutes.
- Inhalation:** Remove from exposure. If breathing is difficult, give oxygen and seek medical attention.
- Ingestion:** Do not induce vomiting. Seek immediate medical assistance.
- Note to Physician:** Gastric lavage using a cuffed endotracheal tube may be performed at your discretion.

HER 01271

J. DOT Transportation

Shipping Name: Cyclohexane
Hazard Class: Flammable Liquid
ID Number: UN 1145
Marking: Cyclohexane/UN 1145
Label: Flammable Liquid
Placard: Flammable/1145
Hazardous Substance/RQ: Not Applicable
Shipping Description: Cyclohexane, Flammable Liquid, UN 1145
Packaging References: 49 CFR 173.118 and 173.119(a)

K. RCRA Classification - Unadulterated Product as a Waste

U056-Cyclohexane; Ignitable

- Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Use NIOSH/MSHA approved respiratory protection, such as air-supplied mask, in confined spaces.

M. Hazard Classification

- ☒ This product meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

<input type="checkbox"/> Combustible Liquid	<input type="checkbox"/> Flammable Aerosol	<input type="checkbox"/> Oxidizer
<input type="checkbox"/> Compressed Gas	<input type="checkbox"/> Explosive	<input type="checkbox"/> Pyrophoric
<input type="checkbox"/> Flammable Gas	<input checked="" type="checkbox"/> Health Hazard (Section F)	<input type="checkbox"/> Unstable
<input checked="" type="checkbox"/> Flammable Liquid	<input type="checkbox"/> Organic Peroxide	<input type="checkbox"/> Water Reactive
<input type="checkbox"/> Flammable Solid		

- ☐ Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

G. Physical Data

Appearance: Colorless Liquid
Odor: Pungent
Boiling Point: Approx. 177F (81C)
Vapor Pressure: 3.2 psia (165 mm Hg) at 100F
Vapor Density (Air = 1): 2.8
Solubility in Water: Negligible
Specific Gravity (H₂O = 1): 0.77 at 60/60F
Percent Volatile by Volume: 100
Evaporation Rate (butyl Acetate = 1): >1
Viscosity: Not Established

II. Fire and Explosion Data

Extinguishing Media: Dry chemical, carbon dioxide (CO₂)

Special Fire Fighting Procedures: Evacuate area.

Under no circumstances should water be used. Water fog or spray may be used to cool exposed containers and equipment. Do not spray water directly on fire - product will float and could be reignited on surface of water.

Fire and Explosion Hazards: Carbon oxides and various hydrocarbons formed when burned. Highly flammable vapors which are heavier than air may accumulate in low areas and/or spread along ground away from handling site. Flash back along vapor trail is possible.

I. Spill, Leak and Disposal Procedures

Precautions Required if Material is Released or Spilled:

Evacuate area of all unnecessary personnel. In case of spill or leak resulting in unknown concentration, use NIOSH/MSHA approved supplied air respirator. In case of spill or leak which results in conditions immediately dangerous to life or health (IDLH) use NIOSH/MSHA approved self-contained breathing apparatus (SCBA) equipment. When entry into or exit from concentrations of unknown exposure, use NIOSH/MSHA approved self-contained breathing apparatus (SCBA). Shut off source, if possible and contain spill. Protect from ignition. Keep out of water sources and sewers. Absorb in

HER 01273

N. Additional Comments

Additional Product Composition Information:

	Ingredient	% By Wt.
98.8%	Cyclohexane	98.7
	Methylcyclopentane	0.4
	Methylhexanes	0.3
	Dimethylpentane	0.2
99.5%	Cyclohexane	99.8
	Related Hydrocarbons	0.2
99.8%	Cyclohexane	99.9
	Related Hydrocarbons	0.1

This product contains the following chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. (See Section B):

Cyclohexane

HER 01274

Chemical and physical data, including toxicity data, for each chemical listed in this section shall be provided to the public upon request. The information shall be provided in a form that is accessible to the public and shall be provided in a timely manner. The information shall be provided in a form that is accessible to the public and shall be provided in a timely manner. The information shall be provided in a form that is accessible to the public and shall be provided in a timely manner.

Barge Cleaning Report

JOB NO 5245 ETA
BARGE NO ETTELH DATE/TIME ARRIVAL 10-10-96 6:50 AM
CUSTOMER BASF DATE/TIME START 10-10-96 7:00 AM
PRODUCT CYCLOHEXANE DATE/TIME COMPLETE 10-10-96

AMOUNT STRIPPED 300

CLEANING INST. BY Robert Per COMPLETION SCH. BY OVERTIME AUTH. BY

BARGE INSP. BY Duarte DATE/TIME 2:30 PM RELEASED TO DATE/TIME

DEEPWELL OPENED: YES N/A NO CLOSED BY NEW GASKET: YES NO

BELOW DECK CARGO PIPELINE:

BLIND OPENED: YES ✓ NO CLOSED BY Rosen NEW GASKET: YES NO

DECK CHECK VALVE OPENED: YES N/A NO CLOSED BY NEW GASKET: YES NO

DECK HEADER BLINDS OPENED: YES ✓ NO INSECTED BY CALEB BRETT

DECK HEADER DRAIN PLUG OPENED: YES ✓ NO CLOSED BY Rosen

VAPOR RECOVERY HEADER OPENED: YES ✓ NO CLOSED BY Rosen NEW GASKET: YES NO

RUST SCALE: YES ✓ NO WASHED OUT BUCKETED OUT

NUMBER OF CARGO TANKS 3 CONDITION OF CARGO VALVES G.O.

SLOP TANK STRIPPED: YES N/A NO DRIP PANS STRIPPED: YES ✓ NO

WEATHER: TEMP 90 RAIN FOG HUMIDITY OVERCAST CLOUDY CLEAR ✓

PIPELINE WASHED: YES NO ✓ PIPELINE BLOWN: YES ✓ NO INSPECTED BY CALEB BRETT

BOW RAKE CHECKED: YES ✓ NO STERN RAKE CHECKED: YES NO

VOIDS: YES ✓ NO SAFETY EQUIPMENT USED:

SUMPS INSPECTED:

NOTICE

All barges cleaned for BASF will be inspected by Caleb Brett. The inspector will have paperwork for the Hercules foreman in charge to sign. The foreman will put two copies in the document mail box. One copy will stay in the mailbox, and the captain of the tugboat that is picking up the barge will not be called until inspection is completed and documentation is in the mailbox. If any problems, BASF logistics representative must be contacted.

Date Inspected 10/10/96

Time in: 1530

Time out: 1535

Inspected By:

Caleb Brett

NO BASF BARGE THAT HAS BEEN CLEANED WILL BE RELEASED UNTIL CALEB BRETT HAS SIGNED THE RELEASE PAPERS. CALEB BRETT WILL BE GIVEN A COPY OF THIS FORM.

HER 01275



TIME LOG

YOUR REFERENCE
OUR REFERENCE

VESSEL E77-114	PRODUCT/CARGO N/A	PORT/TERMINAL Hercules	DATE 10-10-96
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[illegible]

For Vessel Luan J. Rivera

ND
FOR CALEB BRETT

HER 01276



Inchcape Testing Services

Caleb Brett

VISUAL TANK INSPECTION REPORT

YOUR REFERENCE
OUR REFERENCE

VESSEL ET-114	PRODUCT / CARGO N/A	PORT / TERMINAL Hercules	DATE 10-10-96
Tank Number	1, 2, 3 c		
Tank Coating	N/A		
Last Cargo	cyclo		
Second Last Cargo	↓		
Third Last Cargo	↓		
Time/Date Inspected	1540 / 10-10-96		
Visual Cleanliness Accepted/Rejected*	accepted		
Reason for Rejection	—		

Method said to have been used to clean tanks:	TK#	Strip & blow / stripped product from cargo tanks & pipeline.
	TK#	air blow dry for 30 min. per tank. vent cargo tank 4 hours.
	TK#	
	TK#	
	TK#	
	TK#	
	TK#	

Information regarding previous cargoes, tank coating and cleaning method was obtained from vessel personnel and cannot be guaranteed as accurate by Caleb Brett and no liability can be assumed for errors resulting from improper information supplied. This report, of necessity, is based on such information.

- * The cleanliness of inspected tank(s) is/are based on visual inspection of tank surfaces and line system at accessible areas only. This document does not cover the cleanliness of tank surfaces and line system at inaccessible spots and/or possible release of components of previous cargoes during loading, discharge or transport of the cargo in question, for which the vessel is fully responsible. Suitability of tank coating for intended cargo must be guaranteed by vessel's owner or by suppliers of the coating.

[Signature]

**HERCULES**

MARINE SERVICES CORPORATION

Strength through environmental awareness and customer service

P.O. Drawer O
Freeport, Texas 77541Office (409) 233-6371
Fax: (409) 233-6375Final Check ListDATE: 10-10-86BARGE: ETT 2114

BLND NUMBER CHECKED

2REPLACED GASKETYES ☐ NO ☒

GATE VALVE NUMBER CHECKED

6YES ☐ NO ☒

PLUGS NUMBER CHECKED

1YES ☐ NO ☒

CHECK VALVE NUMBER CHECKED

N/AYES ☐ NO ☒

DEEPWELL BLIND NUMBER CHECKED

N/AYES ☐ NO ☒

BELOW DECK CARGO PIPELINE BLIND NUMBER

N/AYES ☐ NO ☒

BELOW DECK CARGO PIPELINE BLIND REMOVED

YES ☒ NO ☐DRIP PAN VALVES: Closed By: Rivera

DRIP PANS COVER:

Closed by: Quintero

CONTAINMENT AREA PLUG OR VALVES:

Closed by: Quintero

AIR TEST CARGO LINE - 40 psi - USING SOAP

SIGNATURE OF TESTER:

Chaudin Quintero

SIGNATURE OF WITNESS:

Jose Quintero

- * CHECK VALVE GASKET WILL BE REPLACED
- * AIR TEST IS LAST THING TO BE DONE BEFORE RELEASING BARGE.

HER 01278

ERIC L. MOORE MARINE CHEMIST OFFICE (713) 520-5479
P. O. BOX V • FREEPORT, TX 77542 FAX (409) 299-6655

MARINE CHEMIST CERTIFICATE

SERIAL NO. G 78761

Survey Requested by LARRY	Vessel Owner or Agent HERCULES	Date 10 OCT 96
Vessel ETI 114	Type of Vessel TANK BARGE	Specific Location of Vessel HERCULES
Last Three (3) Cargoes CYCLOHEXANE	Tests Performed LEL-O₂-PID-VISUAL	Time Survey Completed 17:00

CARGO TANKS No 1, 2 & 3

WING TANKS No 1, 2, 3 & 4 - PORT
& STARBOARD

SAFE FOR WORKERS

SAFE FOR HOTWORK

BOW RAKE

STERN BOX

ATMOSPHERIC TEST 20.8% O₂
0% LEL
0 PPM

PROVIDE VENTILATION DURING ALL ENTRY BY WORKERS

In the event of any physical or atmospheric changes adversely affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist

QUALIFICATIONS: Movement of vessels from original location, transfer of ballast, or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306 Subsections 2-3.1 through 2-3.5, and Subsection 6-3.2)

SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

NOT SAFE FOR WORKERS: Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met.

ENTER WITH RESTRICTIONS: Means that in any compartment or space so designated, entry for work may be made only if conditions of proper protective equipment, clothing, and time are as specified.

SAFE FOR HOT WORK: Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements.

NOT SAFE FOR HOT WORK: Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met.

SAFE FOR REPAIR YARD ENTRY: Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted.

CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

The undersigned acknowledges receipt of this Certificate under Section 2-6 of NFPA 306 and understands conditions and limitations under which it was issued.

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed _____ Name _____ Company _____ Date _____ Signed *Eric Moore* Marine Chemist

NOTE: THIS CERTIFICATE IS VALID ONLY ON MARINE VESSELS

20M-2-88

VESSEL POSTING

Printed in U.S.A.

HER 01279

ERIC L. MOORE MARINE CHEMIST OFFICE (713) 520-5479
P. O. BOX V - FREEPORT, TX 77542 FAX (409) 298-6655

MARINE CHEMIST CERTIFICATE

SERIAL NO. G78761

Survey Requested by LARRY ETT114	Vessel Owner or Agent HERCULES TANK BARGE	Date 10 OCT 96
Vessel CYCLOHEXANE	Type of Vessel LEL - PID - VISUAL	Specific Location of Vessel HERCULES
Last Three (3) Cargoes	Tests Performed	Time Survey Completed 17:00

CARGO TANKS No 1, 2 & 3

WING TANKS No 1, 2, 3 & 4 - PORT
& STARBOARD

SAFE FOR WORKERS

SAFE FOR HOTWORK

BOW RAKE

STERN BOX

ATMOSPHERIC TEST 20.8% O₂
0% LEL
0 PPM

PROVIDE VENTILATION DURING AIR ENTRY BY WORKERS

In the event of any physical or atmospheric changes adversely affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist

QUALIFICATIONS: Movement of vessels from original location, transfer of ballast, or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306 Subsections 2-3.1 through 2-3.5, and Subsection 6-3.2)

SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

NOT SAFE FOR WORKERS: Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met.

ENTER WITH RESTRICTIONS: Means that in any compartment or space so designated, entry for work may be made only if conditions of proper protective equipment, clothing, and time are as specified.

SAFE FOR HOT WORK: Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements.

NOT SAFE FOR HOT WORK: Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met.

SAFE FOR REPAIR YARD ENTRY: Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted

CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

The undersigned acknowledges receipt of this Certificate under Section 2-6 of NFPA 306 and understands conditions and limitations under which it was issued.

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed _____ Name _____ Company _____ Date _____ Signed *Eric Moore* Marine Chemist

NOTE: THIS CERTIFICATE IS VALID ONLY ON MARINE VESSELS

20M-2-88

CUSTOMER COPY

Printed in U.S.A.

HER 01280

LARRY Survey Requested by
ETT 114
CYCLOHEXANE Vessel
Last Three (3) Cargoes
HERCULES Vessel Owner or Agent
THANK BUDGE Type of Vessel
LEL-O₂-PID-VISUAL Tests Performed
10 OCT 96 Date
HERCULES Specific Location of Vessel
17.00 Time Survey Completed

CARGO TANKS No 1 2 & 3

WING TANKS No 1, 2, 3 & 4 - PORT

& STARBOARD

SAFE FOR WORKERS

SAFE FOR HOTWORK

BOW RAKE

STERN BOX

ATMOSPHERIC TEST 20.8% O₂

0% LEL

0 PPM

PROVIDE VENTILATION DURING ALL ENTRY BY WORKERS

In the event of any physical or atmospheric changes adversely affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist

QUALIFICATIONS: Movement of vessels from original location, transfer of ballast, or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or release of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306 Subsections 2-3.1 through 2-3.5, and Subsection 6-3.2)

SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

NOT SAFE FOR WORKERS: Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met.

ENTER WITH RESTRICTIONS: Means that in any compartment or space so designated, entry for work may be made only if conditions of proper protective equipment, clothing, and time are as specified.

SAFE FOR HOT WORK: Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements.

NOT SAFE FOR HOT WORK: Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met.

SAFE FOR REPAIR YARD ENTRY: Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted.

CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

The undersigned acknowledges receipt of this Certificate under Section 2-6 of NFPA 306 and understands conditions and limitations under which it was issued.

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed _____
Name

Company

Date

Signed _____
Marine Chemist

NOTE: THIS CERTIFICATE IS VALID ONLY ON MARINE VESSELS

ERIC L. MOORE MARINE CHEMIST OFFICE (713) 520-5479
P. O. BOX V - FREEPORT, TX 77542 FAX (409) 298-8055

MARINE CHEMIST CERTIFICATE
SERIAL NO. G78761

Survey Requested by LARRY Vessel Owner or Agent HERCULES Date 10 OCT 96
ETT 114 Vessel HERCULES
Vessel CYCLOHEXANE Type of Vessel LEL - PID - VISUAL Specific Location of Vessel 17.00
Last Three (3) Cargoes Tests Performed Time Survey Completed

CARGO TANKS No 1 2 & 3

WING TANKS No 1, 2, 3 & 4 - PORT
& STARBOARD

SAFE FOR WORKERS

SAFE FOR HOTWORK

BOW RAKE

STERN BOX

ATMOSPHERIC TEST 20.8% O₂

0% LEL

0 PPM

PROVIDE VENTILATION DURING AIR ENTRY BY WORKERS

In the event of any physical or atmospheric changes adversely affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist.

QUALIFICATIONS: Movement of vessels from original location, transfer of ballast, or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306 Subsections 2-3.1 through 2-3.5, and Subsection 6-3.2)

SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

NOT SAFE FOR WORKERS: Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met.

ENTER WITH RESTRICTIONS: Means that in any compartment or space so designated, entry for work may be made only if conditions of proper protective equipment, clothing, and time are as specified.

SAFE FOR HOT WORK: Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements.

NOT SAFE FOR HOT WORK: Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met.

SAFE FOR REPAIR YARD ENTRY: Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted.

CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

The undersigned acknowledges receipt of this Certificate under Section 2-6 of NFPA 306 and understands conditions and limitations under which it was issued.

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed _____
Name

Company

Date

Signed Eric Moore
Marine Chemist

NOTE: THIS CERTIFICATE IS VALID ONLY ON MARINE VESSELS

20M-2-88

Printed in U.S.A.

HER 01282

MARINE CHEMIST CERTIFICATE
SERIAL NO. G78761

Survey Requested by LARRY ETT 114	Vessel Owner or Agent HERCULES TANK BARGE	Date 10 OCT 96 HERCULES
Vessel CYCLOHEXANE	Type of Vessel LEL - PID - VISUAL	Specific Location of Vessel 17.00
Last Three (3) Cargoes	Tests Performed	Time Survey Completed

CARGO TANKS NO 1 2 & 3

WING TANKS NO 1, 2, 3 & 4 - PORT

& SHARBOARD

SAFE FOR WORKERS

SAFE FOR HOTWORK

DOUBLE

STERN BOX

ATMOSPHERIC TEST 20.8% O₂

0% LEL

0 PPM

PROVIDE VENTILATION DURING ALL ENTRY BY WORKERS

In the event of any physical or atmospheric changes adversely affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist.

QUALIFICATIONS: Movement of vessels from original location, transfer of ballast, or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306 Subsections 2-3.1 through 2-3.5, and Subsection 6-3.2)

SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

NOT SAFE FOR WORKERS: Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met.

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NOT SAFE FOR HOT WORK: Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met.

SAFE FOR REPAIR YARD ENTRY: Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted.

CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledges receipt of this Certificate under Section 2-6 of NFPA 306 and understands conditions and limitations under which it was issued."

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed _____ Name _____ Company _____ Date _____ Signed _____ Marine Chemist _____

NOTE: THIS CERTIFICATE IS VALID ONLY ON MARINE VESSELS

HERCULES OFFSHORE CO.

INVOICE NO. _____

MARINE REPAIR

MARINE OPERATIONS FACILITY

ORDER No. 10-5245

CUSTOMER P.O. _____

DATE	ORDER WRITTEN <u>10-9-96</u>	ETA
	ARRIVAL	
	COMPLETION DATE	
	DEPARTURE DATE	
	M/V <input type="checkbox"/> BARGE <input type="checkbox"/>	
	NAME <u>ETT 114</u>	
	LOA	WIDTH
	FOREMAN	
	LAST PRODUCT	
	GAS FREEING YES <input type="checkbox"/> NO <input type="checkbox"/>	CERTIFICATE REQUIRED YES <input type="checkbox"/> NO <input type="checkbox"/>
	HAUL OUT FOR INSPECTION AND REPAIR YES <input type="checkbox"/> NO <input type="checkbox"/>	
	ON WAYS	DATE: _____
	ON WAYS	DATE: _____

CUSTOMER	NAME <u>BASF</u>
	BILLING ADDRESS
	CITY AND STATE
	PHONE NUMBER
	WORK AUTHORIZED BY <u>Bob Petters</u>
	STOCK MATERIAL <input type="checkbox"/> YES <input type="checkbox"/> NO
	IF YES, COMPLETE STOCK MATERIAL TRANSFER TICKET
	OUTSIDE SERVICES IF YES, LIST <input type="checkbox"/> YES <input type="checkbox"/> NO

ITEM NUMBERS

- 1 Deballast, repair hole in Bow Rake.
Strip & Blow DRY
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

THIS SHALL SERVE AS YOUR AUTHORIZATION TO PROCEED WITH THE ABOVE.

Signed: _____ Date: _____

HER 01284

HERCULES OFFSHORE CO.

MARINE REPAIR

ORDER No. 10-5245

MARINE OPERATIONS FACILITY

INVOICE NO. _____

CUSTOMER P.O. _____

DATE	ORDER WRITTEN <u>10-9-96</u>	ETA
	ARRIVAL	
	COMPLETION DATE	
	DEPARTURE DATE	
M/V <input type="checkbox"/> BARGE <input type="checkbox"/> <u>ETT 114</u>		
NAME		
LOA		
WIDTH		
FOREMAN		
LAST PRODUCT		
GAS FREEING YES <input type="checkbox"/> NO <input type="checkbox"/> CERTIFICATE REQUIRED YES <input type="checkbox"/> NO <input type="checkbox"/>		
HAUL OUT FOR INSPECTION AND REPAIR YES <input type="checkbox"/> NO <input type="checkbox"/>		
ON WAYS DATE: _____		
ON WAYS DATE: _____		

CUSTOMER	NAME <u>BASF</u>
	BILLING ADDRESS
	CITY AND STATE
	PHONE NUMBER
WORK AUTHORIZED BY <u>Bob Petters</u>	
O/Y AUTHORIZED BY	
STOCK MATERIAL <input type="checkbox"/> YES <input type="checkbox"/> NO	
IF YES, COMPLETE STOCK MATERIAL TRANSFER TICKET	
OUTSIDE SERVICES <input type="checkbox"/> YES <input type="checkbox"/> NO	
IF YES, LIST	

ITEM NUMBERS

- 1 Deballast, repair hole in Bow Rake.
Strip & Blow DRY
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

THIS SHALL SERVE AS YOUR AUTHORIZATION TO PROCEED WITH THE ABOVE.

Signed: _____ Date: _____

HER 01285